1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

INFORMANTS

Name	*Moiety*	*Sib*	*Village*	*Dialect*	*Description*
1. José Antón	Coyote	Aapap	Pisinimo	Koroti	Chief of Pisinimo
2. Bernabé López (Donkey Shoulder)	Coyote	Apki	San Pedro	Archie	Chief of San Pedro village; orator at drinking ceremony
3. José Enos	Coyote	Aapap	Kaka	Huhura	Sub-chief of Kaka village in charge of liquor ceremony, hereditary dancer at green corn ceremony
4. José Morano	Buzzard	Maam	Covered Wells	Archie	Hereditary speaker at mocking bird drinking ceremony, orator for salt expedition
5. Jim Thomas (Dionisio)	Coyote	Apki	Anegam	Archie	An elder who accompanied Anekam salt expeditions; keeper of the calendar stick
6. José Marcellino	. . .	. . .	Akchin	Archie	One of the elders who accompanied Akchin salt expeditions
7. Juan Gregorio	Coyote	Aapap	Santa Rosa	Archie	Enemy slayer in mock battle, therefore possessing war trophy and ritual
8. Albert Antón	Coyote	Aapap	Santa Rosa	Archie	Enemy slayer in mock battle with war trophy and ritual; village elder versed in ceremonials; *wlikita* singer

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1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

Name	*Moiety*	*Sib*	*Village*	*Dialect*	*Description*
9. Santiago Maristo	Coyote	Aapap	Komarik	Archie	War shaman; father, an enemy slayer whose trophy he now tends; one of the four official narrators of the origin myth
10. Juan Marcos	. . .	. . .	Little Tucson	Archie	One of the four official narrators of the origin myth
11. Justín	Coyote	Aapap	Quitovaca	Koroti	Official keeper of regalia for *wlikita* and deer dance
12. Juan López	. . .	. . .	Santa Rosa	Archie	Hereditary clown for *wlikita* ceremony; one of the hereditary song composers for *wlikita* ceremony; a composer of modern song cycles
13. José Pancho	Buzzard	Maam	Santa Rosa	Archie	A young man with good memory who had learned much from his two grandfathers, shamans, and his father, hereditary clown and song composer
14. José Xavier	Buzzard	Okori	Cowlic	Koroti	Organizer of Cowelick Easter Ceremony
15. Pete Jim	Buzzard	Maam	Santa Rosa	Archie	Elected speaker for moral talk at drinking ceremony
16. Patricio López	Coyote	Aapap	Choulic	Archie	Shaman and eagle killer
17. Tomaso Flores	Coyote	Aapap	San Miguel	Koroti	Professional herb doctor and singer for curing

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Name	Moiety	Sib	Village	Dialect	Description
18. Donkey Tail	...	...	...	...	Professional herb collector and peddler
19. José Castillo	Coyote	Aapap	Choulic	Archie	Professional singer for curing, especially disease caused by war trophy
20. Juan Diego	Buzzard	Okori	Tecolote	Koroti	Professional singer for curing, especially eye trouble
21. José Santos	Buzzard	Maam	San Xavier	Archie	Keeper of the calendar stick for San Xavier
22. José Ramón (Salt-in-the-coffee)	Coyote	Aapap	Big Fields and San Isidro	Archie	Professional hunter of deer
23. Joaquin López	Buzzard	Maam	Iron Pump	Archie	Professional hunter and worker in hides
24. Harry Leonardo	...	...	San Xavier	Archie	Professional deer hunter
25. Ben Johnson	...	...	Ajo	Koroti	
26. María Chona	Coyote	Apki	Santa Rosa	Archie	Expert basket maker; had learned much from her father (a chief), her first husband (a shaman), and her second (a singer, hereditary clown and keeper of the calendar stick)
27. Angelita López	...	...	Santa Rosa	Archie	Expert potter; composer of songs
28. Angelita Tapia	Coyote	Apki	San Isidro	Archie	Expert potter and basket maker

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1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

Name	Moiety	Sib	Village	Dialect	Description
29. Lupe Garcia	Buzzard	Maam	Poso Verde	Koroti	Expert potter; storyteller
30. Juan Harvey	Buzzard	Maam	Choulic	Archie	Phoenix Indian School, Cook Bible School; Phoenix Interpreter
31. John Pancho	Buzzard	Maam	Santa Rosa	Archie	Interpreter
32. Carmen Pancho	. . .	Okori	Koroti	Koroti	Interpreter; wife of John Pancho
33. Rafael Gonzalez	. . .	. . .	Tucson	Archie	Sherman Institute, Riverside, California, Interpreter
34. Lucy Cachorro	. . .	Okori	San Miguel	Koroti	Interpreter
35. Ella López	Coyote	Aapap	Santa Rosa	Archie	Interpreter
36. Frank Vásquez	(moiety lost)	Okori	Pisinimo	Koroti	Interpreter
37. Pablo Santos	Buzzard	Maam	San Xavier	Archie	Interpreter
38. Enos Francisco	Buzzard	Maam	Poso Verde	Koroti	Interpreter
39. Ha Piitchim (Happy Jim)	. . .	. . .	Kaka	Huhuhra	Keeper of hunting ritual
40. Louis Petero (komaki, gray)	Coyote	Apki	Cirenaca	Archie	
41. Ismil Luis	Coyote	Apki	Emita	Huhuhra	(shaman)
42. Harry Pablo	Coyote	Apki	Anegam	Kuhatk	
43. Rosa Thomas	. . .	. . .	Sikorhimat	Archie	Consulted for genealogies

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2: Underhill E-5 (1931-1935)1939 NU28 Papago NU28

INFORMANTS[1]

m = moiety s = sib v = village d = dialect

115 1. Jose Anton, m Coyote s aapap v Pisinimo d Koloti. Chief of Pisinimo.

2. Bernabe Lopez (Donkey Shoulder), m Coyote s apki v San Pedro d Archie Chief of San Pedro village, orator at drinking ceremony.

3. Jose Enos, m Coyote s aapap v Kaka d Huhura Sub-chief of Kaka village, in charge of liquor ceremony, hereditary dancer at green corn ceremony.

4. Jose Morano, m Buzzard s maam v Covered Wells d Archie Hereditary Mocking Bird speaker at drinking ceremony and orator for salt expedition, Covered Wells.

5. Jim Thomas (Dionisio), m Coyote s apki v Anegam d Archie One of the elders who accompanied Anekam salt expeditions; Keeper of the Anekam calendar stick.

6. Jose Marcellino, m s v Akchin d Archie One of the elders who accompanied Akchin salt expeditions.

7. Juan Gregorio, m Coyote s aapap v Santa Rosa d Archie Enemy Slayer in mock battle, but therefore possessing war trophy and ritual.

8. Albert Anton, m Coyote s aapap v Santa Rosa d Archie Enemy Slayer in mock battle with war trophy and ritual; village elder versed in ceremonials; wiikita singer.

9. Santiago Maristo, m Coyote s aapap v Comalick d Archie War shaman; father, an Enemy Slayer whose trophy he now tends; one of the four official narrators of the origin myth.

10. Juan Marcos, m s v Little Tucson d Archie One of the four official narrators of the origin myth.

11. Justin, m Coyote s aapap v Quitovaca d Koloti Official keeper of regalia for Quitovaca wiikita and deer dance.

12. Juan Lopez, m s v Santa Rosa d Archie Hereditary clown for wiikita ceremony; one of the hereditary song composers for wiikita ceremony; a composer of modern song cycles.

13. Jose Pablo, m Buzzard s maam v Santa Rosa d Archie A young man with good memory who had learned much from his two grandfathers, shamans, and his father, hereditary clown and song composer.

14. Jose Xavier, m Buzzard s okori v Cowlic d Koloti Organizer of Cowelick Easter Ceremony.

15. Pete Jim, m Buzzard s maam v Santa Rosa d Archie Elected speaker for moral talk at drinking ceremony.

16. Patricio Lopez, m Coyote s apap v Choulic d Archie Shaman and eagle killer.

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[1] For brevity, informants quoted in the text are referred to by number.

2: Underhill E-5 (1931-1935)1939 NU28 Papago NU28

17. Tomaso Flores, m Coyote s aapap v San Miguel d Koloti Professional herb doctor and singer for curing.
18. Donkey Tail, Professional herb collector and peddler.
19. Jose Castillo, m Coyote s aapap v Choulic d Archie Professional singer for curing, especially disease caused by war trophy.
20. Juan Diego, m Buzzard s okori v Tecaloti d Koloti Professional singer for curing, especially eye trouble.
21. Jose Santos, m Buzzard s maam v San Xavier d Archie Keeper of the calendar stick for San Xavier.
22. Jose Ramon (Salt in the Coffee), m Coyote s aapap v Big Fields and San Isidro d Archie Professional hunter of deer.
23. Joaquin Lopez, m Buzzard s maam v Iron Pump d Archie Professional hunter and worker in hides.
24. Harry Leonardo, m s v San Xavier d Archie Professional deer hunter.
25. Ben Johnson, Ajo d Koloti.
26. Maria Chona, m Coyote s apki- v Santa Rosa d Archie Expert basket maker; had learned much from her father, a chief, her first husband, a shaman, and her second, a singer, hereditary clown and keeper of calendar stick.
27. Angelita Lopez, m s v Santa Rosa d Archie Expert potter; composer of songs.
28. Angelita Tapia, m Coyote s apki v San Isidro d Archie Expert potter amd basket maker.
29. Lupe Garcia, m Buzzard s maam v Poso Verde d Koloti Expert potter; storyteller.
30. Juan Harvey, m Buzzard s maam v Choulik d Archie Phoenix Indian School, Cook Bible School, Phoenix interpreter.
31. John Pancho, m Buzzard s maam v Santa Rosa d Archie interpreter.
32. Carmen Pancho (wife of above), m s okori v Koloti d Koloti interpreter.
33. Rafael Gonzalez, affiliation lost v Tucson d Archie Sherman Institute, Riverside, California interpreter.
34. Lucy Cachorro, moiety lost s okori v San Miguel d Koloti interpreter.
35. Ella Lopez, m Coyote s aapap v Santa Rosa d Archie interpreter.
36. Frank Vasquez, moiety lost s okori v Pisinimo d Koloti interpreter.
37. Pablo Santos, m Buzzard s maam v San Xavier d Archie interpreter.
38. Enos Francisco, m Buzzard s maam v Poso Verde d Koloti interpreter.
39. ha piitchim (Happy Jim), keeper of hunting ritual v Kaka d Huhuhra.
40. Louis Petero (komaki, gray), m Coyote apki v Cirenaca d Archie.
41. Ismil Luis, m Coyote s apki v Emita d Huhuhra (shaman).
42. Harry Pablo, m Coyote s apki v Anegam d Kuhatk.
43. Rosa Thomas, (consulted for genealogies) v Sikorhimat d Archie.

3: Underhill E-5 (1931-1935) 1936
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The essential differentiation between Papago and Pima, which is now so obvious, began at this time. The Pima adopted American names and American clothing, and by 1871 had an American school. Meantime the Papago, when they spoke any language at all but their own, spoke Spanish, wore mantillas, and regarded the Altar Valley as their source of culture. More important still, the Pima gave up most of their ancient ceremonies while the Papago continued theirs.

Among the most important had been the ceremonies for war. The marauding Apache, in the hills to the east of Pimeria, had provided constant persecution since Kino's time, but in 1887 they were subdued by the United States, with the help of both Pima and Papago.

After this, scalps were no longer taken, and the important ceremonies of the warpath, of victory, and of warrior's purification were abandoned. But, until the present generation, the Papago continued their intervillage games with the accompanying dances, their cleansing ceremony for food, and their driving away of evil. Even yet, the northern part of the reservation ferments liquor from the giant cactus fruit and drinks it ritually as a magic to saturate the earth with rain. The shamans still practise, and the lay curers dream songs which give each one power over some particular disease sent by a particular animal. Other power can still be obtained, if not from scalps, then at least by the killing of an eagle or the ritual fetching of salt from the Gulf of California. Most of these ceremonies, as they occurred some fifty years ago, are described in the succeeding pages.

The writer made a series of ethnological studies among the Papago under the auspices of Columbia University, covering the periods June to October 1931, February to October 1933, November to January 1934, and October to November 1935, much of the work being financed by the Columbia University Council of the Social Sciences. During most of this time the narrator of the following autobiography, Maria Chona, acted as informant, hostess, guide, and means of introduction to the various villages, in most of which she had relatives or descendants.

Chona is a corruption of the Spanish name Encarnacion, with which the old woman had been baptized on a childhood trip to Mexico. She was the daughter of a prominent leader, José María, nicknamed Con Quien, the name of a Spanish card game. Since the words themselves would have little significance, the nickname has been translated hereafter as "The Gambler." Chona was inordinately proud of this father who had been appointed village chief or "governor" when the Papago first came under American supervision. The Papago custom in most ancient times had been to have a ceremonial leader who performed a few executive functions, but

3: Underhill E-5 (1931-1935) 1936
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the Spaniards instituted the office of governor and the Americans continued it. Chona's father was the governor of Mesquite Root (kuitatk), an ancient village now abandoned, and Chona spent her girlhood there under conditions differing very little from those of pre-Spanish days.

The story of her past was her constant preoccupation, and snatches of it were narrated at every apportunity. Most of it was taken through an interpreter, for, though the writer spoke a little Papago and Chona a little Spanish, it seemed desirable that her words should be transcribed exactly. They were not taken in text but in as accurate a translation as the writer, engaged in a study of Papago grammar, could work out. The wording, therefore, expresses Chona's thought as accurately as may be.

The arrangement, however, is the writer's. Chona is ninety years old and her memory works with the fitfulness of age, presenting incidents in repetitious confusion. The only possible system was to write each one separately, add to it all the amendments which occurred to her during the years of our acquaintance, and then to question her patiently about the chronology until the correct order was worked out. She repeated each episode so often, however, that there was finally no question as to their sequence.

But the matter of accuracy in both chronology and wording being settled, there still remain, in presenting an Indian autobiography, important questions of technique. Indian narrative style involves a repetition and a dwelling on unimportant details which confuse the White reader and make it hard for him to follow the story. Motives are never explained and the writer has found even Indians at a loss to interpret them in the older myths. Emotional states are summed up in such colorless phrases as "I liked it," "I did not like it." For one not deeply immersed in the culture the real significance escapes.

The writer felt most deeply the objections to distorting Chona's narrative. Yet if it had been written down exactly as she herself emitted it, there would have been immense emphasis on matters strange to her but commonplace to Whites and complete omission of some of the most interesting phases in her development. Therefore a pattern was followed. While the essentials of the narratives were retained it is hoped at every point, many of the repetitions were excised and the reader is warned of this fact just as he is warned, in the preface to a grammar, that certain phonetic changes regularly take place.

On the other hand, Chona was not allowed to pass over the crises of her life with a mere word. While she had no objection to expressing her emotional states, she took them for granted. But, on being asked, she would amplify in such vivid phrases as "Fear went through me like a snake."

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128 Therefore she was frequently asked, and as a result the story has elaboration and emphasis at some points where she would not have placed them, and it stops short where she would have found repetition comfortable. It is an Indian story told to satisfy Whites rather than Indians.

115 124 562 There were reasons other than intimacy and opportunity for choosing Chona as the narrator. She is not the aberrant type which so frequently attracts the attention of the White investigator. She accepted her culture completely, and one reason for choosing her was that she had come into contact with so many of its important phases. As a woman, she could take no active part in the ceremonial life. But her father was a governor and a warrior; her brother and one husband were shamans; her second husband was a song leader and composer. And a Papago woman's history is interesting in itself, because, in this culture, there persists strongly the fear of woman's impurity with all its consequent social adjustments.

115 562 Chona accepted her status without stress or rancor. She was, however, not the ideal Papago female type, for she was inclined to be independent and executive. In her old age, when such qualities were not taboo, she ruled her whole connection with a competent hand. In childhood she had a minor maladjustment, soon overcome: she started to make songs. Making songs [677] is the Papago achievement *par excellence*, all outward acts being considered merely as a preparation for it. Chona was no poet by nature: she was, in fact, an executive. But she had some urge to accomplish, as the men accomplished, and the proper avenue was song making. So Chona made songs [756] and saw visions, and had to have her shaman's crystals cut out by a minor operation.

She submitted, and found compensation in her life of child bearing and hard work. But in old age the urge came on her again, and again there was no outlet but visions. These later visions are pathetic in their lack of originality, and the songs which she assured me she had composed herself were often changed, only by a word or two, from songs which had been well known for years. Many Papago compose in this way, since song making is a *sine qua non* for success in life. None consider it plagiarism, for song making is the spiritual crown conferred on one who has already achieved in the physical world.

Chona, in her way, achieved. She learned a manipulation of sick babies which was much respected. Very possibly she had observed its performance by her first husband who was a shaman, but the Papago pattern did not allow her to recognize this: she had to dream it, and she did. She picked up other bits of practical medicine, and she had a dynamic personality which drew patients to her. In the end she did all that her culture would allow her toward satisfying her desires and she was not unhappy.

3: Underhill E-5 (1931-1935) 1936
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In love, she again showed independence. For a shaman to have more than one wife was standard custom but Chona resented her co-wife. She felt "unnaturally" and against all precedent the same emotions that a White woman is expected to feel "naturally" in such a circumstance. The result was a minor rebellion, soon settled. Chona's life, on the whole, presents a fair picture of the crises which come to a Papago woman, heightened by a dynamic personality.

I

We lived at Mesquite Root and my father was chief there. That was a good place, high up among the hills, but flat, with a little wash where you could plant corn. Prickly pear grew there so thick that in summer, when you picked the fruit, it was only four steps from one bush to the next. And cholla cactus grew and there were ironwood trees. Good nuts they have! There were birds flying around, doves and woodpeckers, and a big rabbit sometimes in the early morning, and quails running across the flat land. Right above us was Quijotoa Mountain, the one where the cloud stands up high and white when we sing for rain.

We lived in a grass house and our relatives, all around us on the smooth flat land, had houses that were the same. Round our houses were, with no smoke hole and just a little door where you crawled in on hands and knees. That was good. The smoke could go out anywhere through the thatch and the air could come in. All our family slept on cactus fibre mats against the wall, pushed tight against it so centipedes and scorpions could not crawl in. There was a mat for each two children, but no, nothing over us. When we were cold, we put wood on the fire.

Early in the morning, in the month of Pleasant Cold, when we had all slept in the house to keep warm, we would wake in the dark to hear my father speaking.

"Open your ears, for I am telling you a good thing. Wake up and listen. Open your ears. Let my words enter them." He spoke in a low voice, so quiet in the dark. Always our fathers spoke to us like that, so low that you thought you were dreaming.

"Wake up and listen. You boys, you should go out and run. So you will be swift in time of war. You girls, you should grind the corn. So you will feed the men and they will fight the enemy. You should practise running. So, in time of war, you may save your lives."

For a long time my father talked to us like that, for he began when it was black dark. I went to sleep, and then he pinched my ear. "Wake up! Do not be idle!"

Then we got up. It was the time we call morning-stands-up, when it is

5: Castetter & Bell N-5 (1938-1940) 1942
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Pima NU29

exist and that among different villages, and even different individuals, variations occur. The following account of Pima and Papago agriculture and of the general basis of subsistence of these people represents a composite picture drawn from a number of informants variable in background, technical knowledge, ability to impart what they knew etc., and no one of whom would be capable of presenting all the ethnographic information herein contained. A deliberate effort has been made to present as complete a picture as possible of the early basis of Piman subsistence, indicating local or individual departures from the general situation wherever these appeared to be significant or were consistent with the limitations imposed by space.

Fortunately the Pimans, particularly the Papago, are a people among whom primitive methods of agricultural technique and of food gathering are still functional and therefore recoverable. Thus it was not difficult to find old informants, especially Papagos, whose knowledge of the old crops, techniques and procedures is extensive.

Following is a list of our main informants and interpreters. Although we have interviewed many additional Pima and Papago informants to obtain data on specific aspects of agriculture, it has not been deemed necessary to list them.

Papago Informants:

Chico Bailey—Pisinemo
Alvina Gerónimo—Big Fields
Emilio Lewis—Emika
José Peters—Silnakya
Bernabé López—San Pedro
San Pablo—Santa Rosa
Santiago Mariste—Komelik
Mattias Hendricks—Vamori
Mariano Domingo—Kohatk
José Santos—San Xavier

Pima Informants:

Manuel Lowe—near Sacaton
Nicolas John—Sweetwater
Lewis Nelson—Casa Blanca
Vanico—near Sacaton
Paul Azule—near Sacaton

Papago Interpreters:

Peter Blaine—Sells
Martin Mariste—Topawa
Joe Raphael—San Xavier
Ralph Gonsales—San Xavier
Rev. Bonaventura Oblasser also kindly assisted in interpreting and as a medium of contact.

Pima Interpreters:

Paul Azule—near Sacaton
Leonard Lowe—near Sacaton
Isaac Paul—Sweetwater

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SPECIAL SIGNS USED IN TRANSCRIPTIONS OF SONGS

These signs are intended simply as aids to the student in becoming acquainted with the songs. They should be understood as supplementary to the descriptive analysis rather than a part of the musical notation.

+ placed above a note shows that the tone was sung slightly higher than the indicated pitch. In many instances the tones designated by this and the following sign were "unfocused tones," or were tones the intonation of which varied in the several renditions of the song. The intonation of these tones was not such as to suggest the intentional use of "fractional intervals" by the singer.

− placed above a note shows that the tone was sung slightly lower than the indicated pitch.

(· placed above a note shows that the tone was prolonged slightly beyond the indicated time. This and the following sign are used only when the deviation from strict time is less than half the time unit of the song and appears to be unimportant. In many instances the duration of the tones thus marked is variable in the several renditions of the song.

·) placed above a note shows that the tone was given slightly less than the indicated time.

⌐¬ placed above a series of notes indicates that these tones constitute a rhythmic unit.

NAMES OF SINGERS AND NUMBERS OF SONGS TRANSCRIBED

Sivariano Garcia	68	Juana Maria	3
Jose Manuel	21	Harry Encinas	2
Mattias Hendricks	20	Mattias Encinas	1
Jose Ascencio	11	Jose Antoin	1
Rafael Mendez	9	Kiyatan	1
Victoria	9	Nuñez	1
Jose Hendricks	8		
Jose Panco	7	Total	167
Leonardo Rios	5		

CHARACTERIZATION OF SINGERS

Sivariano Garcia, who recorded more songs than any other Papago, lives at San Xavier and is the singer with Owl Woman when she treats the sick. He is familiar with all the old tribal songs and has an excellent voice.

Jose Manuel of Sells is a carpenter by trade. He was one of the Papago who volunteered to go with the United States Cavalry on

6: Densmore E-5 (1920) 1929NU28 Papago NU28

115 their quest of Geronimo and was with them when the famous Apache was captured.

Mattias Hendricks, whose songs are next in number, is chief at Vomari village and acted as interpreter during the writer's work in that locality. His father is said to have been chief of all the Papago.

Jose Ascencio, also of Vomari, is an energetic, industrious man with a particularly wide knowledge of old songs and customs.

Rafael Mendez lives at Vomari. His selection of songs shows a refinement and poetry that are interesting.

Victoria is an aged member of the tribe living at Sells. His voice is weak but he recalls many old songs.

Jose Hendricks, brother of Mattias Hendricks of Vomari, is almost totally blind. The light was so painful to his eyes that he was photographed with eyes downcast. In the words of his songs, like those of Mendez, we find particularly fine examples of native poetry.

Jose Panco, of San Xavier, was a doctor who treated those afflicted with "deer sickness." He died in 1928.

Leonardo Rios, who also lives at San Xavier, expressed a conviction that a machine could not record and reproduce the voices of Indians. His statement was brought to the writer's attention, when working at that place, and he was invited to come and hear the records made by his friends. Later he recorded several songs.

The only woman who recorded songs was Juana Maria of Sells, an aged woman living in the Papago village near the agency.

Harry Encinas, the interpreter at San Xavier, is not familiar with many old songs but recorded two which are of rather unusual interest.

Mattias Encinas, his father, is not considered a singer but recorded the songs of his dream, one of which is presented.

Jose Antoin is chief at Pisinimak village, northwest of Sells.

Kiyatan is an old medicine man living at San Xavier, a man of keen eye and quiet manner.

The only young man except Harry Encinas who was asked to record songs was Nuñes, who recorded one song.

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SIVARIANO GARCIA PLAYING FLUTE

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6: Densmore E-5 (1920)1929 NU28 Papago NU28

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a, Jose Pance using scraping sticks with basket resonator

b, Rivariano Garcia, Harry Encinas, and Jose Pance pounding basket drum

6: Densmore E-5 (1920) 1929NU28 Papago NU28

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a, Mattise Hendricks

b, Mother of Mattise Hendricks

6: Densmore E-5 (1920)1929 NU28 Papago NU28

Why don't you go and join the fun?" The old woman went to the dance and they gave her a cigarette made of a certain plant. She smoked it and fell asleep. Then they carried her across the line into Mexico. They carried her to a little mountain and put her in a tunnel. It was a deep tunnel and they put her in the farther end, piled wood across the entrance, and set fire to it. She was so strong that she rose up and split the top of the mountain but Elder Brother drew it together again. Mattias Hendricks, who recorded numerous songs, said he had seen the split in the mountain and the footprints which are about 12 inches long and 4 inches wide. He said it seemed as though Elder Brother stood astride the split, as his footprints are on both sides of it. The final story of the series is a continuation of this and states that an old woman came to the place where the animals were eating the old woman who was burned in the tunnel. They did not give her any, but she got hold of some charred blood and took it home, and it turned into a peacock.

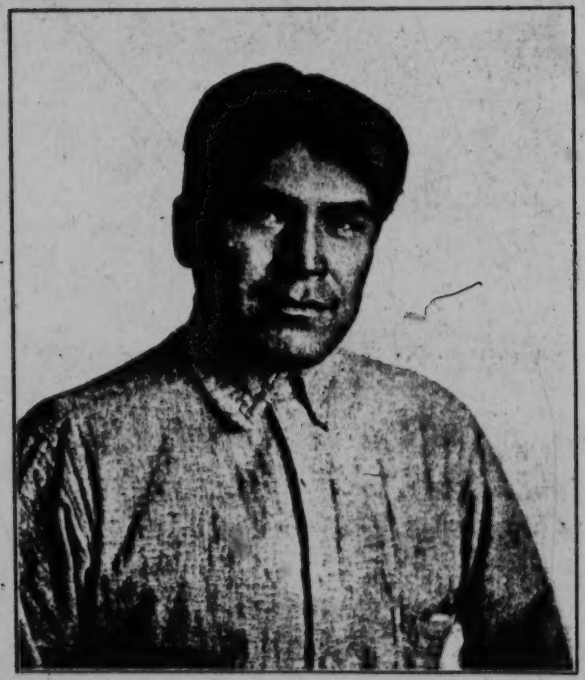
The following narrative contains portions of the first Papago creation myth, the informants selecting the portions most closely associated with songs.[1] This narrative was obtained at Vomari village, about 7 miles from the Mexican border. Mattias Hendricks (pl. 8, *a*) was chief of this village. His mother (pl. 8, *b*) was among the informants who united with the singers in giving these stories. The other singers at Vomari were Jose Hendricks (pl. 14, *a*), Jose Ascencio (pl. 17, *b*), and Rafael Mendez (pl. 17, *c*). The wife and child of Mattias Hendricks are shown in Plate 9.

Story of the Ashes People

In the old times there was a flood that covered the whole earth. Elder Brother gathered gum from a certain bush (usabugum) and made a big olla. He took every sort of animal with him, and got into the olla. Last of all came Coyote and wanted to get in. Elder Brother told him there was some bamboo growing in the west. He told Coyote to get some of this bamboo. Coyote brought it. Then Elder Brother cut off the end and put Coyote inside, letting his tail hang out. The flood came while Elder Brother was doing this, and soon everything was afloat.

When the water subsided, Elder Brother came out of the olla and Coyote came out of the bamboo. They met four times as they were walking. Coyote was all muddy and could not walk very well because of the mud, but he sang the following song as he was walking toward Elder Brother.

[1] For a more complete version of these and other stories see Frank Russell, The Pima Indians, Twenty-sixth Ann. Rept. Bur. Amer. Ethn., 1908.



a, Harry Encinas

b, Leonardo Rios

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6: Densmore E-5 (1920)1929 NU28 Papago NU28

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6: Densmore E-5 (1920) 1929NU28 Papago NU28

• 115
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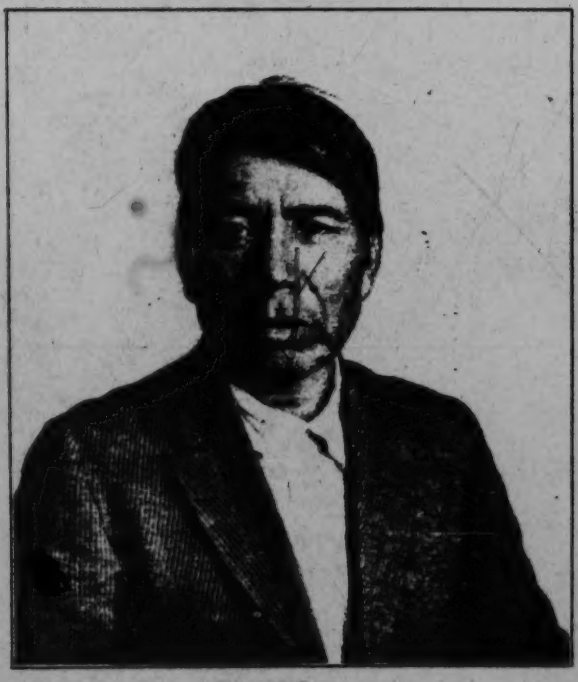
a, Jose Hendricks



b, Jose Panco

6: Densmore E-5 (1920) 1929NU28 Papago NU28

LC
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.D91

a, Owl Woman

b, Sivariano Garcia

[p. 92-B]

a, Jose Manuel

b, Jose Asencio

c, Rafael Mendez

[p. 114-A]

6: Densmore E-5 (1920)1929 NU28 Papago NU28

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1+2
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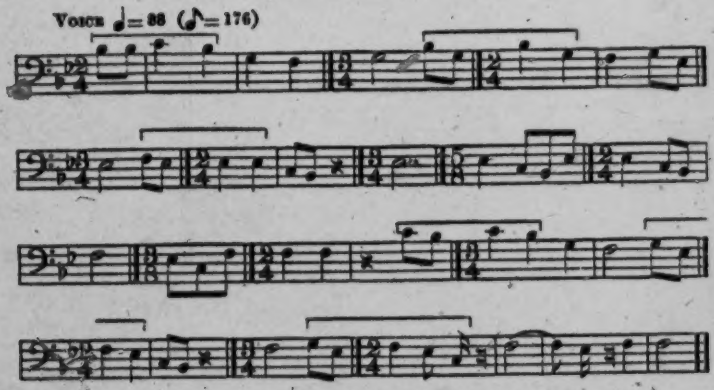
6: Densmore E-5 (1920) 1929NU28 Papago NU28

No. 103. "A Flaming Light in the East"

(Catalogue No. 1008)

Recorded by JOSE MANUEL



TRANSLATION

We see the light that brightens in the east,
It seems to turn to flame,
On the edge of it is something that looks like a white feather,
But we see that it is white clouds.

Analysis.—This particularly pleasing melody is classified with B-flat as the keynote, though the third above that tone does not occur. The tone material is that of the first five-toned scale, in which the third and seventh tones of the octave are omitted. It is interesting to note the difference of accent in measures 1 to 3 and 16 to 18. The rests and the time in the 3–8 and 5–8 measures were given with clearness.

THE RAIN CEREMONY

796 In the early part of August the Papago held a festival at which the medicine men made divinations for rain. This was in accordance [ETJ] with an ancient custom and was accompanied by the drinking of a wine made from the fruit of the saguaro cactus and commonly called "tiswin."[99] The principal informants on this subject were Jose Antoin, 115 of Sells, and Mattias Hendricks, of Vomari. Practically the only difference in the two narratives was that informants at Hendricks village, in the extreme south of the reservation, said that songs were received by men while under the influence of the native wine. Information was also obtained from Sivariano Garcia, of San Xavier, but in this, as in the account of the bamboo game contest, his account was said by the informants to be the Pima version. Jose Antoin is chief of the rather large village of Pisinamak, and a small village called

[99] The Papago designation is ha'sen (saguaro cactus) na'ṣi (drink).

6: Densmore E-5 (1920)1929 NU28 Papago NU28

Harimak. He had acted as leader of the entire tiswin ceremony. His father was chief and he would have inherited the office at his father's death, as he was the oldest son, but he was so reluctant to accept the office that he left the village. He remained away several years until the people sent for him and the Government representative in charge of the reservation authorized his election as chief. The village obtained its name in the following manner: A war party killed a certain animal, brought home its head and put it in a tree. One of the early priests saw this and asked what they called it. They could not explain, and he said it was the head of a *Pisin* (Spanish word). After that time the village was called Pisinamak, the latter part of the word meaning "head" in the Papago language. Hendricks is chief at Vomari village.

Antoin related the following origin of the custom of making and drinking tiswin and said the incident took place at his village. There was once a woman who had a little boy. She wanted to go to another village to play *tholo* (a woman's game), so she put the child [a] to bed, placed food and water beside him, and left him alone. After a while the child awakened, ate the food, and followed his mother. He came to where they were playing the game and sat down. A woman running around in the game would see the child and say, "I found a little child;" and the mother would say, "Let him alone; he belongs to me." When the game was finished the mother took up the child, tied a cloth around his head, and stuck a feather in the cloth. Then the little boy went and played with the other children. All went well until the other children began to tease the little boy, saying he was too proud of his feather. The child stood it as long as he could, then he said that perhaps there was something inside his head of which he could be more proud than of his feather. He made a circle on the ground, stood inside it and began to sink into the ground. Some of the children said, "We had better tell his mother." One child ran and told, but when his mother got there he had sunk entirely out of sight except the feather. His mother took that out, then she went to work and called the badger, who is the best digger, and told him to catch up to the boy and bring him back. The badger dug as hard as possible but he could not overtake the boy. Then the mother called all the birds together and said, "Which of you can find a lost boy?" The crow said, "I think I can find him." The crow started and found the boy in the Kiyota Mountains. He returned and told the mother. Then the people said, "Let us go to the Kiyota Mountains and see how the boy looks." They went and found the boy standing there. The mother wanted him to go home, but the boy said, "No; I want to stay in the hills, but I will be of use to my people." Then he turned slowly into a saguaro cactus and told the people what to do. He told

[a] Throughout this narrative the term used to designate this boy is Ali, the Papago term for "child."

7: Lumholtz N-5 (1909-1910) 1912
NU28 Papago NU28

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PAPAGO: GUADALUPE, MY COMPANION FROM QUITOVAC

PAPAGO: MIGUEL, MEDICINE MAN FROM LA NARIZ

Girl
PARENTS: CHIÑAMAN AND YAQUI

Boy
PARENTS: SPANIARD AND PAPAGO

[Facing p. 344]

13:Davis E-5 (1920) 1920 NU28 Papago NU28

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778

and the bag closed so that no human eye might thereafter see them. To this day, with possibly one or two exceptions, no person has ever seen the hearts. The bag was kept in a Papago medicine basket, made of palmetto fiber, which in turn, together with all the wrappings and ceremonial paraphernalia, was placed in two large ollas, then sealed up and hidden in a secret cave in the mountains. Many years ago an Indian with an evil mind broke in and stole the male heart, so that only the female heart remains.

[115]

Manuel Ortega, an old Papago Indian, with whom the writer stayed, said that at one time he happened to be near when the keeper of the heart was rearranging or changing the eagle-feathers used as a bed for the heart. Becoming entangled in the feathers, the keeper pulled the heart out of the bag, and it fell to the ground. Ortega saw the heart before the keeper could return it to the bag, and as nearly as he could remember, it appeared to be a round, greenish stone about as large as a baseball. The Indians say they have sometimes heard the

13:Davis E-5 (1920)1920 NU28 Papago NU28

[Facing p. 164 (A)

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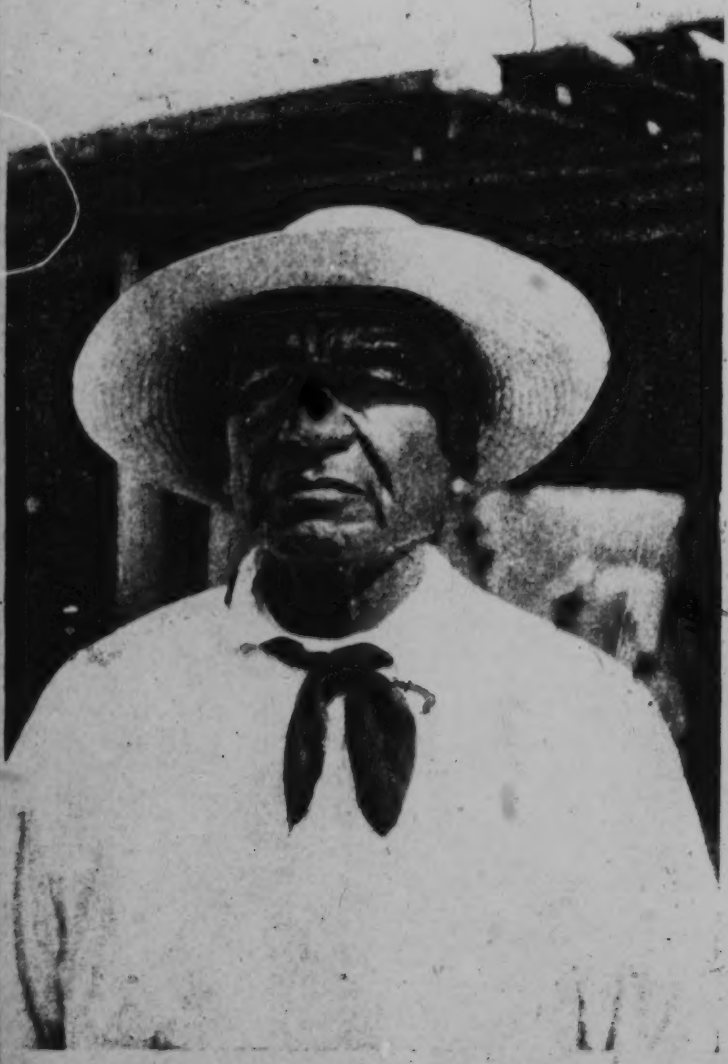

MANUEL ORTEGA, CAPITAN AT QUITOVAQUITA

13:Davis E-5 (1920)1920 NU28 Papago NU28

[Facing p. 166]

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KIÂ'HÂD ("RAINBOW"), WHO RELATED THE LEGEND OF THE MONSTER

15: Kroeber B-4 (no date) 1909
NU28 Papago NU28

000 She had not been long at home when the Copper-Islanders decided to give a "play," as was the custom. To this celebration the people of Bering and Attu Islands were invited. These plays were held in a large barabara built for this particular purpose. When all were assembled, the villages took turns in dancing and singing. As a rule, the songs were improvised on the spur of the moment, and consisted chiefly of a sing-song recital, illustrated by gestures, of the important happenings in that particular village since the last "play." The Bering-Islanders sang of the loss of their man, and the sorrow it caused to his relatives, especially his wife. She was present and listened; and when she could restrain herself no longer, she, loosening her hair, rushed into the middle of the hall, and began to sing. With the help of her gestures, she sang and acted the whole tragic drama, — the invitation, the berry-picking, the murder, the disposition of the corpse, — leaving out nothing, and concluding by giving the reasons for the deed and her bitter disappointment.

The chiefs at once sent several men to Bering Island, who returned with the head of the murdered man, found where she had described. Her guilt being certain, the married men and women gathered again in the dance-hall to deal with the murderess. The head was placed in the centre, and around it the guilty woman danced, sang, and acted her degenerate story from beginning to end. When she had finished, the men undressed her completely, and tied her to a post near to the dead head, which faced her. Then they began to kill her slowly, first cutting off her breasts; and in the same deliberate and cruel manner they proceeded to cut off other parts of the body, especially the more sensitive. Every piece of flesh cut off was placed on the head of the man. It is said that she lived even after her intestines were removed, and until her heart was touched. While she was being unmercifully butchered, not a tear or complaint escaped her. So long as she could sing, she was heard to say, "I killed him for my lover. I lost both of them. Do what you please with me."

F. A. Golder.

Boston, Mass.

115 Papago Coyote Tales. — The following Coyote tales were told by Juan Dolores.

539 *Coyote.* — Tsi'ihŏ came out after the Flood before Coyote, and is therefore the older brother of Coyote and the people. When Coyote was young, the people grew jealous of him and tried to kill him. In consequence he went through many dangers, suffered heat and cold, hunger and thirst, but finally married. He then retired from activity and took up his abode in a beautiful spot in the east. His experiences and escapes gave Coyote wisdom and knowledge, and many people came to him for advice and information about the future. From these people he received presents when they profited from his instruction. Thus he lived at ease with his wife and son.

This son Coyote brought up carefully, attempting to prepare him for the difficulties of his life. But the young Coyote never grew wise or brave, nor was he a good hunter. His only good features were that he was handsome and a good runner. But he thought himself wise, refused to listen to his father any longer, and would not believe what the people told who visited his father. Life soon became too commonplace for him, and he decided to visit the four corners of the earth.

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Again the Bureau of Indian Affairs attempted to reduce the confusion by securing the approval of the National Board of Geographic Names for a list of designations approved by the Papago Tribe, (Papago Place Names, 1957). Highway maps commonly use these "official" names and we have maintained this tradition.

103

Confusion in place names, however, is likely to continue. Anglos constantly refer to Quijotoa as Covered Wells, Gu Vo as Kerwo and Wahak Hotonok as San Simon or Tracy's. Indians, among themselves, sometimes have names for villages which are seldom heard and never used by Anglos. Selis, for example, is most commonly referred to as /S̄ h'onidoko/ or /Komkoch-ethe-e-S̄ h'onidoko/ (turtle-caught-in-a-crook). Nevertheless, interviews with 32 Indian informants disclosed that official names are usually the ones used by Papagos with, of course, the Papago pronunciation. Exceptions, in addition to Selis, are Jewaka for Quijotoa, Feije Hoko for Santa Rosa, San Simon for Wahak Hotonok and Wank for San Xavier.

[115]

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Villages. The Bureau of Ethnic Research at the University of Arizona, in connection with various studies, has compiled an exhaustive list of Papago place names. In total, 173 separate names were listed, but only 149 have been positively identified and accounted for as separate and distinct locations. From this list of 149 locations, 45 settlements were considered by Delmos Jones (1962) to be villages.

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Table 13. The Distribution of Stock Units on the Main Reservation in 1962 Compared with the Estimated Carrying Capacity

District	Stock Unit Capacity	Stock Units	Cattle	Horses
Babocuivari	1,780	2,261	1,612	436
Chukut Kuk	1,064	2,440*	1,720	680
Gu Achi	1,000	1,512*	1,000	424
Gu Ve	462	1,085*	410	380
Hickiwan	930	2,062*	1,000	850
Pisinimo	1,003	1,960	1,470	408
Schuk Toak	2,102	1,799*	900	560
Sells	1,067	2,022*	1,210	620
Sif Oidak	880	861	464	318
Totals	10,304	16,070	10,082	4,770

[115] [128] Robert Roether, one of the major cattle buyers on the reservation, is of the opinion that the above estimates are too low for cattle and too high for horses.

233 422 Fully as important as the number of cattle and horses grazed, is their ownership. All cattle on the reservation are owned by Indians and, except for 200 head in a tribal herd, ownership is by individuals and families. [217] No actual records are kept of individual holdings, although the tribal office keeps a record of sales by individuals. The Bureau of Indian Affairs now estimates that at least seven families have from 200 to 600 head of cattle each, that about ten families have 100 to 150 head, and that most families have about ten head or less. The number of individuals and

* Because no livestock count figures are available, these numbers are estimated.

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[015]

A series of dry years, culminating in a serious drought during the summer of 1962, may, however, account for some of the reduction in flood water farming. In the Santa Rosa area where four farmers were interviewed, acreage had been cut from 125 to 25, and five of the 25 acres had been abandoned after planting in 1962 on account of the drought.

[015]

In the Chuichu area five farmers were interviewed. Thirty-one, out of a possible 50 acres, were being farmed. In the Ou Vo area a few farmers had attempted to farm from three to four acres each but lack of rain had forced them to give up the attempt.

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Crops grown in the above areas were the same as elsewhere. The major crop was beans, followed by corn, squash, and watermelons. Other crops included wheat, barley and sugar cane.

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The significance of the Indian Service farm survey in the southeastern corner of the reservation is greatly enhanced by a previous careful survey, that of Clotts in 1914. The fields and their approximate acreages are shown on Map 6.[1] For the entire reservation Clotts recorded 9,177 acres devoted to flood water farming. For the area covered by the recent survey Clotts recorded 5,537 acres being farmed. The recent BIA survey shows that only 536 of these acres are now being farmed and that the amount of land that could be

[1] [See map on P. 78-A1, A2 and A3 -- Analyst]

162 (1) On reservation, 461 (18.2%), on and off reservation, 235 (13.2%),
163 and off reservation, 1,739 (68.6%).

(2) Agricultural employment, 1,409 (55.6%), non-agricultural employment, 1,015 (40.0%), and mixed employment, 111 (4.4%).

(3) Skilled and semi-skilled workers, 348* (10.0%), and unskilled 3,387 (90.0%).

As was noted above, (Table 16, Page 96) about one-half of the Papagos in our records for whom we have residence data make their usual home on the reservation. The data above show that 18% of the labor force earn their principal income from on-reservation agriculture and wage work and an additional 13% earn their principal income from both on and off reservation employment. The remaining group (close to 20%) usually live on the reservation but earn their principal income off the reservation.

163 We could not make a satisfactory distinction between the skilled and
128 semi-skilled workers. In addition, we have almost surely placed some semi-skilled
145 workers in our unskilled categories. Most of our information is from neighbors or relatives of the people involved who knew that a person was employed by a construction firm or in an aircraft factory, for example, but had no knowledge of the type of work performed. In other cases, individuals were variously employed at skilled and semi-skilled work and other individuals were variously employed at semi-skilled and unskilled work. Informants gave us, in most cases, complete data on these multi-employed individuals but there is still a subjective element in both the information and the coding.

162 Approximately ten percent of the Papago labor force is engaged in
163 skilled and semi-skilled employment. These are the farm equipment operators,

[text continues on p. 103]

*An estimated 30 individuals engaged in reservation stock raising and irrigated farming should perhaps be counted as semi-skilled or skilled. We did not make the distinction at the time and so the table shows a total of 250 unskilled workers in this category.

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[101]

Papago Agricultural Workers in Pima County. Agricultural work off the reservation is of such great importance to Papago family economics that we felt it necessary to make a special study of this subject. The project was planned and executed in 1961 by Mr. Harland Padfield, a Department of Anthropology graduate student who is an authority on this subject. Unfortunately, the study was limited to Pima County since funds did not permit the extension of the research to other sections of southern Arizona.

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Mr. Padfield was able to establish two points: (1) Papago Indians in farm work are shifting to other jobs than seasonal cotton picking and are not being displaced because of mechanization, (2) they account for 30 percent of the total man-hour input and 27 percent of the total wage input on Pima County farms and receive total annual earnings of about $630,000. The evidence, although not conclusive, also indicates that there is a steady increase in the training and use of Papagos in the operation of farm machinery and in other skilled jobs.

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The author concludes his report with the following words: "These data should make it patently clear that with the Papago Reservation virtually surrounded by 370,000 acres of farm land needing a labor force in excess of 10,000 workers and a labor expenditure probably in excess of $13,000,000 annually, programs and policies aimed at the problem of Papago economics cannot ignore farm labor; neither can programs and policies aimed at the problem of farm labor ignore the Papago Indians."

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Padfield's work was based upon an area sample which permitted him to generalize from detailed interviews with 21 of the 119 farm operators in Pima County with a total acreage of 29,796 out of 66,875. Data thus collected was supplemented through interviews with crew leaders who recruited the seasonal workers, mostly cotton pickers, for the farms drawn in the sample.

657 There are five welfare categories, Old Age Assistance, Aid to Dependent Children, Aid to the Blind (all administered by the state welfare office), Child Welfare and General Assistance (administered by the Bureau of Indian Affairs). In addition, everyone eligible for assistance in the above categories, plus those of minimum income, are eligible for surplus food under the Surplus Commodities Program (a state agency).

162 By 1962, according to Jones, the number of reservation welfare cases
657 had jumped from 448 to 536, not counting an estimated fifteen children receiving Child Welfare benefits and 170 heads of households receiving surplus food. Counting dependents this means that more than 1800 residents out of a total of about 5000 on the three Papago reservations are receiving some assistance, directly or indirectly, from welfare programs.

162 Welfare statistics pertaining to the Papago reservations are given in
657 Table 27. Trends for fiscal years 1958 through 1962 indicate a gradual increase
178 in Aid to Dependent Children cases. This has been noted also for the non-Indian
[115] population as a whole. An opinion with respect to the reason for this was provided
[586] by Pima County welfare officials. More women and children tend to return to the reservation, or remain there. More women are finding out about ADC grants. In addition, there is a national increase, as well as a local increase, in divorce.
[848] There is also an increase in illegitimacy. The primary cause for the condition that makes a woman and her children eligible for A.D.C., however, is the death,
[164] disability or desertion of the father. On the reservations death claims 25% of
[165] such cases, disability 22%, and desertion about 19% of the total.
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162 Given the nature of Papago family economy, the results of a comparison
171 with the non-Indian population of Pima County are not particularly surprising.
657 For 1961 the non-Indian population of the county was estimated to be 48 times as large as the reservation Indian population. Using the population ratio of 1 to 48

19: Doby.as E-5 (1950) 1951 NU28 Papago NU28

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122 The information reported herein was mostly gathered first-hand by the auther, primarily between October 1 and December 15, 1950, under the sponsorship of the Department of Anthropology, University of Arizona. Dr. Emil W. Haury, Head of the Department, furnished greatly appreciated encouragement and arranged for film to make a photographic record. Dr. Edward H. Spicer, Professor of Anthropology, guided the research and reporting after furnishing the original inspiration for the project and proposing it to the Indian Bureau. Any deficiencies in this report---and there are many--- are not the responsibility of these men. They are due to the writer's failure to investigate as well as he has been trained to do, and a lack of sufficient funds to investigate as thoroughly as he would have preferred. This last deficiency may be charged to the failure of the American public to appreciate the necessity for social research to sound public administration, as expressed in failure of Congress to appropriate to the Indian Bureau adequate research monies.

122 For their assistance in making this report as good as it may be, the writer is grateful to Drs. Spicer and Haury. I am indebted to the U. S. Indian Bureau and Mr. and Mrs. W. A. Pottenger for help in financing my research, and to the Board of Regents of the University and State Colleges of Arizona for its approval of the project. My thanks also go to the Anthropology Club at the University of Arizona for use of its mimeographing facilities for quick preparation of this paper. *Principal credit for any excellences in this report belongs to the farmers and the Papagos who patiently answered many questions.*

[115]

3: Whited G-5 (1890) 1894 NT15 River Yumans
Papago NU 28

101 of the jesuit missionaries. When a considerable number of them had accepted the teachings of the missionaries
797 they were called, by way of distinction, Papagos, from the Spanish word for pope, "papa". Baptism was involved in their becoming christians, and hair cutting was an incidental result of the influence of the missionaries. Neither of these facts, however, can account for the name. On the other hand, the derivation from "papa" is etymological and consistent with the facts. They had become adherent to the pope. So far as I can learn, this explanation of and origin of the name has never been published.

The resident missionary at Sacaton gave still another derivation of the word Papago. He speaks and preaches in the Indian tongue, and thinks the name is derived from the word "pa-pa-cot", meaning discontented. This could easily be corrupted into Papago. The Indians at an early date became much dissatisfied with the exactions and tyranny of the jesuits, and this term was naturally applied to them.

166 The Papagos are a seminomadic tribe, their migrations being due to the peculiar character of the country which they inhabit. The exigencies of food, water, and labor are the principal causes of their temporary changes of habitation; but the extent of their migrations, and the localities which they occupy for varying periods, are within certain limitations. When, through the presence of wells or running water, the supply of that indispensable element is unfailing, they migrate in search of food or labor.

[312] When the water supply, which is procured from natural water holes or the earth reservoirs constructed by them, called tanks, where it accumulates during the rainy season, has been consumed, they remove to the vicinity of wells or running water found in the canyons of the mountains or in the deep valleys among the foothills. This migratory feature of their life greatly enhances the difficulty of an exact enumeration of the tribe.

[131] The territory over which they range lies south of the Southern Pacific railroad, in Arizona, and is about 100 by 150 miles in extent. Many thousands are also located in the state of Sonora, Mexico. They move back and forth at will between the two countries, and when a village is found in motion inquiry alone can determine, and then not always with certainty, on which side of the line they really belong.

161 From various publications relating to Arizona, and from the statements of ranchmen, miners, traders, surveyors, and a census enumerator, quite conflicting and divergent estimates were obtained of the number of the Papagos. These estimates range from 3,000 to 7,000, while most of them agree on 5,000 or 6,000 as the real number. One difficulty to be experienced in their enumeration is that at any season of the year a village of permanent houses, evidently the abode of hundreds of Indians, may be found without a single inhabitant, not because it has been deserted, but because the inhabitants are gone temporarily, leaving no information as to where they have gone, for what purpose, or for how long a time, and it would be impracticable to wait until their return or to follow them.

The only available method for obtaining even an approximate estimate of the number of these Indians seemed to be to ascertain, as far as practicable, the number of their villages and the aggregate number of houses contained in them. Multiplying the total number of houses by the average number of inmates per house would give a reasonable result. By actually counting the inmates of many houses in several villages, and with the indorsement of the judgment of the enumerator, 5 was adopted as the average number of inmates per house. As not less than 4 nor more than 11 were found in any given case, it was decided that 5 would be a conservative average and insure a total within the actual number rather than in excess of it.

126 In the accompanying map, showing the route during a 10 days' trip through the Papago country, Pima county is
161 given on a scale of 7.5 inches to the mile. The villages are located from actual visitation or on information, with no effort at mathematical accuracy, but with the design of suggesting relations and distances. The trip was planned so as to reach as many villages as possible during the time allowed and to make a fair and correct census. The villages given in red are those actually visited, 5 of which were located by the Indians. The 2 villages marked with black, situated near the large ranch, were located, but omitted by mistake. The accompanying figures indicate the number of houses in each village. The villages given in black were located through the courtesy of

● [115] a trader among the Papagos, who is generally conceded to be the best informed person in Arizona in everything which relates to the tribe. The figures in black indicate his estimate of the population of each village. His estimate of the numbers living in the villages actually visited in enumerating varied only about 25, more or less, from the numbers in the given villages obtained by the multiplication of the number of houses by 5. In the cases mentioned the population was from 300 to 500, and such close agreement gave additional credibility to both his and our estimate.

161 The number of resident Indians at San Xavier was ascertained exactly when the reservation was divided among them in severalty, and is perfectly reliable.

Papagos at San Xavier	363
Papagos on line of expedition:	
447 houses, multiplied by 5	2,235
Additional, estimated by I. D. Smith	2,465
	5,063
Additional, reported by C. W. Crouse, agent at Sacaton (Papagos on the old reservation at Gila Bend)	40
Resident at Sacaton reservation	80
Total	5,183